

Abstract

The invention relates to an optical inclinometer. According to the invention, an incline-dependent medium, e.g. a liquid surface, is positioned in the pupil of an optical subsystem and a detectable wave front is imaged onto a detector by means of said medium. A phase displacement of radiation emitted from a radiation source is caused by said medium; the interaction of the radiation and the medium can take place during reflection or transmission. An aberration of the wave front caused by the medium can be analyzed by means of a wave front sensor and compensated by an evaluation unit or the detector. A wave front sensor having a diffractive structure formed upstream of each subaperture is compact and increases the resolution and the detectable angular region of the inclinometer.